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## **Historical CCR5 $\Delta$ 32 Frequencies in Central Europe**

Bouwman, Abigail S ; Warinner, C ; Shved, N ; Akgül, Gülfirde ; Rühli, Frank J

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## Institute of Evolutionary Medicine (IEM)

# Welcome!

Welcome to the official webpage of the Institute of Evolutionary Medicine (IEM). In September 2014 the former Centre for Evolutionary Medicine (ZEM) was upgraded to the new Institute of Evolutionary Medicine (IEM).

The IEM is a leading international and globally connected research, teaching and service institute which is part of the medical faculty at the University of Zurich. Researchers at the IEM analyse ancient biological material and associated data to better understand modern human health issues and diseases. Due to specialist scientific expertise, excellent infrastructure and state-of-the-art methods, researchers at the IEM are able to work on such interdisciplinary research questions as 'How does the past (for example the evolutionary origins of diseases) inform the present and the future?' in the context of the field of Evolutionary Medicine.

Find more basic information about the IEM under [The Institute](#), [its Vision](#), [the Mission Statement](#) or the [Institute Structure](#).

## Spotlight on our Activities:

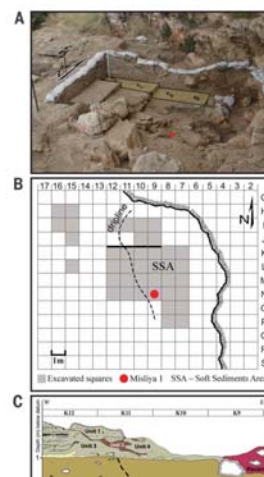
### RESEARCH

#### PALEOANTHROPOLOGY

### The earliest modern humans outside Africa

Israel Hershkovitz,<sup>1,2,†</sup> Gerhard W. Weber,<sup>3,†</sup> Rolf Quam,<sup>4,5,6,†</sup> Mathieu Duval,<sup>7,8</sup> Rainer Grün,<sup>7,9</sup> Leslie Kinsley,<sup>9</sup> Avner Ayalon,<sup>10</sup> Miryam Bar-Matthews,<sup>10</sup> Helene Valladas,<sup>11</sup> Norbert Mercier,<sup>12</sup> Juan Luis Arsuaga,<sup>5,13</sup> María Martín-Torres,<sup>8,14</sup> José María Bermúdez de Castro,<sup>8,14</sup> Cinzia Fornai,<sup>3,15</sup> Laura Martín-Francés,<sup>8,16</sup> Rachel Sarig,<sup>2,17</sup> Hila May,<sup>1,2</sup> Viktoria A. Krenn,<sup>3,15</sup> Viviane Slon,<sup>1</sup> Laura Rodríguez,<sup>5,18,19</sup> Rebeca García,<sup>5,18</sup> Carlos Lorenzo,<sup>20,21</sup> Jose Miguel Carretero,<sup>5,18</sup> Amos Frumkin,<sup>22</sup> Ruth Shahack-Gross,<sup>23</sup> Daniella E. Bar-Yosef Mayer,<sup>24,25</sup> Yaming Cui,<sup>26</sup> Xinzhi Wu,<sup>26</sup> Natan Peled,<sup>27</sup> Iris Groman-Yaroslavski,<sup>28</sup> Lior Weissbrod,<sup>28</sup> Reuven Yeshurun,<sup>28</sup> Alexander Tsatskin,<sup>28</sup> Yossi Zaidner,<sup>28,29</sup> Mina Weinstein-Evron<sup>28</sup>

To date, the earliest modern human fossils found outside of Africa are dated to around 90,000 to 120,000 years ago at the Levantine sites of Skhul and Qafzeh. A maxilla and associated dentition recently discovered at Misiya Cave, Israel, was dated to 177,000 to 194,000 years ago, suggesting that members of the *Homo sapiens* clade left Africa earlier than previously thought. This finding changes our view on modern human dispersal and is consistent with recent genetic studies, which have posited the possibility of an earlier dispersal of *Homo sapiens* around 220,000 years ago. The Misiya maxilla is associated with full-fledged Levallois technology in the Levant, suggesting that the emergence of this technology is linked to the appearance of *Homo sapiens* in the region, as has been documented in Africa.



**26.01.2018: IEM-members Cinzia Fornai and Viktoria Krenn co-authored a [recent research paper in Science Magazine](#) about the earliest modern humans outside Africa.**

## Address and Contact

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## News Blog

**Seminars in Evolutionary Medicine, FS 2018 (14.02-23.05.2018)**

**19.01.2018 Paläopathologisches Kolloquium "Trauma und Traumafolgen"**

**"Die 1000 Frauen des Pharao" by ARTE, research by scientists/archeologists from the University of Basel and the Institute of Evolutionary Medicine**

**Seminartalk "Development of obesity and what we can do against it" from Prof. Dr. Thomas Lutz is postponed to 10.01.2018**

**Virtual exhibition "Die Geburtszange von Smellie"**



**Institute of Evolutionary Medicine (IEM)**



**Seminars in Evolutionary Medicine FS2018**  
Wednesday, 16:15 - ca. 17:00, UZH Irchel Campus, Room Y42 G53

14.02.2018	Prof. Dr. Robert Martin (Institute of Evolutionary Medicine, University of Zurich, and The Field Museum, Chicago, USA): "The Field Museum's Mummy Project"
20.02.2018	Prof. Dr. Andreas Wagner (Department of Evolutionary Biology and Environmental Studies, University of Zurich): "Simple experimental systems that shed light on the evolution of complex organisms"
14.03.2018	Prof. Dr. Olivier Despont (Institute of Physiology, University of Zurich): "Genetics of kidney disease: An evolutionary perspective"
28.03.2018	Prof. Dr. Jan D. Leunig (Department of Neuroscience, University Medical Center Gessner): "Multiple elements and animal models pathogen experience on evolutionary and individual time scales"
11.04.2018	Prof. Dr. Elmar Ebert (Institute of Zoology, University of Basel): "Does host-parasite coevolution generate genetic diversity?"
25.04.2018	Prof. Dr. Barbara Klöckl (Department of Evolutionary Biology and Environmental Studies, University of Zurich): "Social information matters - an evolutionary analysis of the social behavior of house mice"
09.05.2018	Prof. Dr. Marcel Sánchez-Villagra (Department of Paleontology, University of Zurich): "The dogs, cats, rhinos and - horses? Morphological diversity and its developmental bases in domesticated animals"
23.05.2018	Symposium: "Towards the origins of lipopigmentation: molecular approaches to understand one of mankind's related diseases." Keynote by Prof. Dr. Anne Stone (Arizona State University, Tempe, USA): "The hyper's tale: relationships among obesity in humans and other animals."

All talks are public events and participation is free. Registration is not required.  
Contact: Dr. Nicole Stender: [nstender@iem.uzh.ch](mailto:nstender@iem.uzh.ch), Webpage: [www.iem.uzh.ch](http://www.iem.uzh.ch)

## Seminars Evolutionary Medicine, FS 2018 (14.02-23.05.2018)

The Seminars in Evolutionary Medicine will start the 14th of February with the talk of Prof. Dr. Robert Martin **"The Field Museum's Mummy Project"**. More information about the seminars can be found [here](#).

You're welcome to visit the Seminars.



**Group Picture (December 2017)**

[Enlarge Group Picture](#)